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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,209	08/07/2001	James Lindsay	36290-151384	2735
23973	7590	02/17/2004	EXAMINER	
DRINKER BIDDLE & REATH ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996			HWU, DAVIS D	
			ART UNIT	PAPER NUMBER
			3752	11
DATE MAILED: 02/17/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,209

Applicant(s)

LINDSAY ET AL.

Examiner

Davis Hwu

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-32 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Response to Amendment

1. Applicant's amendment and remarks of February 4, 2004 is acknowledged and entered as paper number 10.
2. Applicant's amendment and remarks have been fully considered. The status of the pending claims are as follows.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcin in view of Pritchard.

The patent to Garcin discloses an apparatus for spraying liquid surface treatment material, the apparatus comprising:

- a housing;
- a liquid inlet 2 for supplying of the liquid surface treatment material;
- a gas inlet for supply of pressurized gas to be mixed with the liquid surface treatment material;
- an outlet nozzle 11 through which the gas and liquid surface treatment is sprayed;
- a control valve 4 adapted to regulate the supply of the liquid surface treatment material to the outlet nozzle;
- a first communicating passageway 5 and a second communicating passageway 14B connecting to the outlet nozzle;

- wherein the second passageway is provided with a stepped portion therein so that a gas vortex is created therethrough (Column 6, lines 3-11).

Garcin does not disclose a gas valve as recited. The patent to Pritchard teaches an apparatus for spraying liquid surface treatment material, the apparatus comprising a housing, a liquid inlet, a gas inlet for supply of pressurized gas, and a gas valve 52 in the gas passageway to control the desired amount of gas. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Garcin by incorporating a gas valve in the gas communicating passageway as taught by Pritchard to control the desired amount of gas. The second passageway is offset from the first passageway, the second passageway is substantially conical in shape, and the second passageway is tapered from the inlet to outlet as recited in claims 2-4.

Allowable Subject Matter

6. Claims 5-32 are allowed.

Response to Arguments

7. Applicant's remarks regarding the art rejection has been fully considered, however, they are not found to be persuasive. The grooves 34-36 on the insert 13 of Garcin extend along sections 31 and 32 of the insert 13 as shown in Figure 2A and since section 32 of the insert extends into the second passage 14B as shown in Figure 1, a stepped portion provided by the grooves projects into the second passage 14B as recited in the amended claim 1. The addition of a gas valve as taught by Pritchard

Art Unit: 3752

would have been obvious to one having ordinary skill in the art, since it is well known that valves are used to control the flow of fluids through various spraying devices.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis Hwu whose telephone number is 703-305-1663. The examiner can normally be reached on M-F 7:30 AM to 4:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Y. Mar can be reached on (703)308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9302. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0861.



Davis Hwu